

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-3 and 5-11 are pending in the present application, Claim 11 having been added by the present amendment. Support for new Claim 11 is found, for example, in the specification at page 8, lines 5-31.

In the outstanding Office Action, Claims 1-3 and 5-10 were rejected under 35 U.S.C. §103(a) as unpatentable over Kroon et al. (WO 00/18041, hereinafter Kroon) in view of McGibney (U.S. Patent No. 6,594,273), and further in view of Borth (U.S. Patent No. 4,852,090).

Applicants respectfully traverse the outstanding ground of rejection because the outstanding Office Action fails to provide a *prima facie* case of obviousness by asserting prior art that, no matter how the prior art references are combined, does not teach every element of independent Claim 1.

To establish a *prima facie* case of obviousness, M.P.E.P. §2143 requires that three criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the references teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claim elements. The outstanding Office Action, with respect to Claim 1, is deficient with respect to the first requirement.

The outstanding Office Action states “it would have been obvious to one of ordinary skill in the art at the time the invention was made to use synchronization method taught by Borth as an *alternative* means for synchronization in the system Kroon in view of

McGibney....”<sup>1</sup> However, Claim 1 requires both a “general services and synchronization sub-channel time slot” and “a first part of the information in each sub-channel time slot as configured to provide synchronization information.” The outstanding Office Action does not provide a motivation to combine the synchronization scheme of Kroon, with the synchronization scheme of McGibney and utilize both synchronization schemes together.

The outstanding Office Action states the scheme of Borth is used as an *alternative* to the scheme of Kroon in view of McGibney to create “a TDMA system that allows for transmission over radio channels at transmission rates in excess over those normally allowed by multipath characteristics of the RF channel as taught by Borth.”<sup>2</sup> This is not a suggestion to combine the synchronization scheme of Borth with the synchronization scheme of Kroon in view of McGibney.

It appears that the outstanding Office Action takes the position that it would be beneficial to modify Borth in view of McGibney with Kroon. However, Applicants respectfully submit that the suggestion that it would be beneficial to modify the above references to include all of the features of Claim 1 is only found in the present specification.

As stated in MPEP § 2143, the standard for establishing obviousness is:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, **there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.** Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

**The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant’s disclosure.** *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (Emphasis Added).

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<sup>1</sup> Office Action, page 5, lines 1-3, emphasis added.

<sup>2</sup> Office Action, page 5, lines 3-6.

Thus, as the outstanding Office Action has pointed to nothing in the references themselves or elsewhere in the record indicating a motivation to combine the cited references in a manner such that the invention of independent Claim 1 would be the result. Applicants respectfully submit that the outstanding Office Action has not satisfied the burden under §2143 for a *prima facie* case of obviousness.

Furthermore, it is only the present specification that discloses the advantages of having a synchronization time slot *and* including synchronization information in the first part of the sub-channel time slots. As disclosed by the present specification, “the synchronization sent on the sub-channel P or D enables the units to get re-synchronized with fine precision on the transmitter of the speech P or data D in question. The synchronization sent on sub-channel S guarantees the consistency of the network by re-synchronizing each station with the master of the network.”<sup>3</sup>

Thus, Applicants submit it is only through an impermissible hindsight reconstruction of Applicants’ invention that the rejection of Claim 1 can be understood.<sup>4</sup>

In view of the above-noted discussion, Applicants respectfully submit that Claim 1 (and Claims 2, 3, and 5-11) patentably distinguish over Kroon, McGibney, and Borth, taken alone or in proper combination.

Moreover, Applicants respectfully submit that Claim 8 further patentably distinguishes over Kroon, McGibney, and Borth, taken alone or in proper combination. Claim 8 recites, *inter alia*,

wherein the anti-collision process comprises:

assigning a random number to each requesting station;

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<sup>3</sup> Specification, page 4, lines 29-32.

<sup>4</sup> MPEP § 2143.01 “Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge of one of ordinary skill in the art.”

the station with the lowest number obtaining a right to transmit first; and

other stations obtaining a right to in an order corresponding to a rising order of the random numbers that have been assigned to them.

The outstanding Office Action relies on Kroon to disclose the above-noted element of Claim 2.

Kroon merely discloses that “a given node waiting to transmit starts its major slot when, it will not interfere with any transmission as determined by the collision avoidance mechanism described above. The majority of nodes will start their major slots almost simultaneously and the start of actual transmission is scheduled to coincide with the beginning of a *randomly* chosen mini-slot within the major slot. Consequently, only packets whose transmission begins at the first chosen mini-slot will experience the collision.”<sup>5</sup> A randomly chosen mini-slot does not equate to the claimed “assigning a random number to each requesting station.” A mini-slot is not a requesting station, and Kroon does not describe or suggest assigning a random number to a requesting station. Furthermore, the process disclosed in Kroon is not an anti-collision process as Kroon itself admits that packets whose transmission begins at the first chosen mini-slot will experience collisions. Collisions occur in Kroon because only mini-slots are randomized and the stations are not randomly assigned a transmitting order (i.e., based on the randomly assigned numbers, each station will have the right to transmit without interference or collisions caused by other stations trying to transmit). Kroon does not disclose or suggest the station with the lowest number obtaining a right to transmit first, and other stations obtaining a right to in an order corresponding to a rising order of the random numbers that have been assigned to them.

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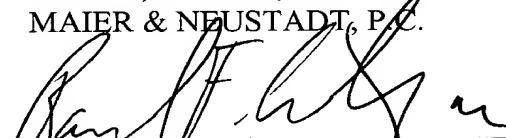
<sup>5</sup> Kroon, page 10, lines 18-24.

The outstanding Office Action only relies on page 16, lines 8-13 of Kroon when rejecting Claim 8. However, page 16, lines 8-13 of Kroon merely discloses that transmission start times on the control channel are determined using either a randomization process in the CSMA protocol or a rotating priority in the TDMA and hybrid CSMA/TDMA protocols. This disclosure in Kroon does not describe or suggest assigning a random number to each requesting station.

Furthermore, McGibney and Borth do not cure the above-noted deficiencies in Kroon. Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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